PATENT
Attorney Docket No. 1459

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s)	Linebarger et al.	Examiner	Payne, David C.
Serial No.	09/784,517	Group Art No.	2633
Filed	February 15, 2001	Confirmation No.	3317
For	System and Method for Transmitting Signals Over a Fiber Strand		

Mailstop Non-Fee Amendment
Commissioner For Patents
P.O. Box 1450Alexandria, VA 22313-1450

Declaration
Under 37 C.F.R. § 1.131

We, Durga P. Satapathy and Michael J. Gettles, declare as follows.

1. We are named inventors for U.S. Patent Application No. 09/784,517, filed on February 15, 2001 (the "Application").

2. Sprint Communications Company L.P. ("Sprint") owns the entire right, title, and interest in and to the Application. The assignment from the named inventors to Sprint is recorded at reel 011602, frame 0543.

3. We have read and understand the specification and claims in the Application.

4. We have reviewed and understand the contents of the Office action dated November 20, 2003, and the references cited therein. We have reviewed and understand in particular U.S. Patent Pub. No. US 2001/0030785, filed by Pangrac et al. ("Pangrac") on December 22, 2000, and published October 18, 2001 ("Pangrac"), and U.S. Patent No. 6,519,062 B1, filed on September 1, 2000, taking priority to Provisional Application No. 60/185,640, filed on February 29, 2000, and issued to Yoo on February 11, 2003 ("Yoo").

5. This declaration is being presented under 37 C.F.R. § 1.131 to establish invention prior to the effective date of Pangrac (December 22, 2000) or conception of the invention prior to the effective date of Pangrac (December 22, 2000) coupled with due diligence prior to that date to a subsequent reduction to practice or to the filing of this Application.

6. This declaration also is being presented under 37 C.F.R. § 1.131 to establish invention prior to the effective date of Yoo (February 29, 2000) or conception of the invention

prior to the effective date of Yoo (February 29, 2000) coupled with due diligence prior to that date to a subsequent reduction to practice or to the filing of this Application.

7. Attached hereto as Exhibit A (10 pages) is an Invention Disclosure Form ("IDF") for a system and method for transmitting signals over a fiber strand (with some portions redacted). The IDF was completed by at least one named inventor and submitted to the Sprint Law Department on February 17, 2000, as noted on page 1 of the IDF. The IDF was signed by a witness on February 17, 2000, as noted on page 6 of the IDF.

8. A complete conception and reduction to practice of at least one embodiment of a system and method for transmitting signals over a fiber strand is identified in the IDF and the document attached to, and forming a part of, the IDF. Therefore, a complete reduction to practice of at least one embodiment of a system and method for transmitting signals over a fiber strand was made at least as early as February 17, 2000.

9. From February 17, 2000 through February 15, 2001, we worked on preparing and finalizing materials for the Application. We filed the Application on February 15, 2001.

10. All acts relied on were carried out within the United States.

11. Fewer than all inventors are making this Declaration because the remaining inventor, John W. Linebarger, is deceased.

I/we hereby declare that all statements made herein of my/our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and such willful false statements may jeopardize the validity of the Application or any patent issued thereon.

Respectfully Submitted,

Date 02/19/2004 By Durga Prasad Satapathy.
Durga P. Satapathy

Date _____ By _____
Michael J. Gettles

Sprint

INVENTION DISCLOSURE FORM

Date: February 17, 2000

Assigned Numbers: Project No. _____ Invention Disclosure No. _____

Law Department File No. 1459

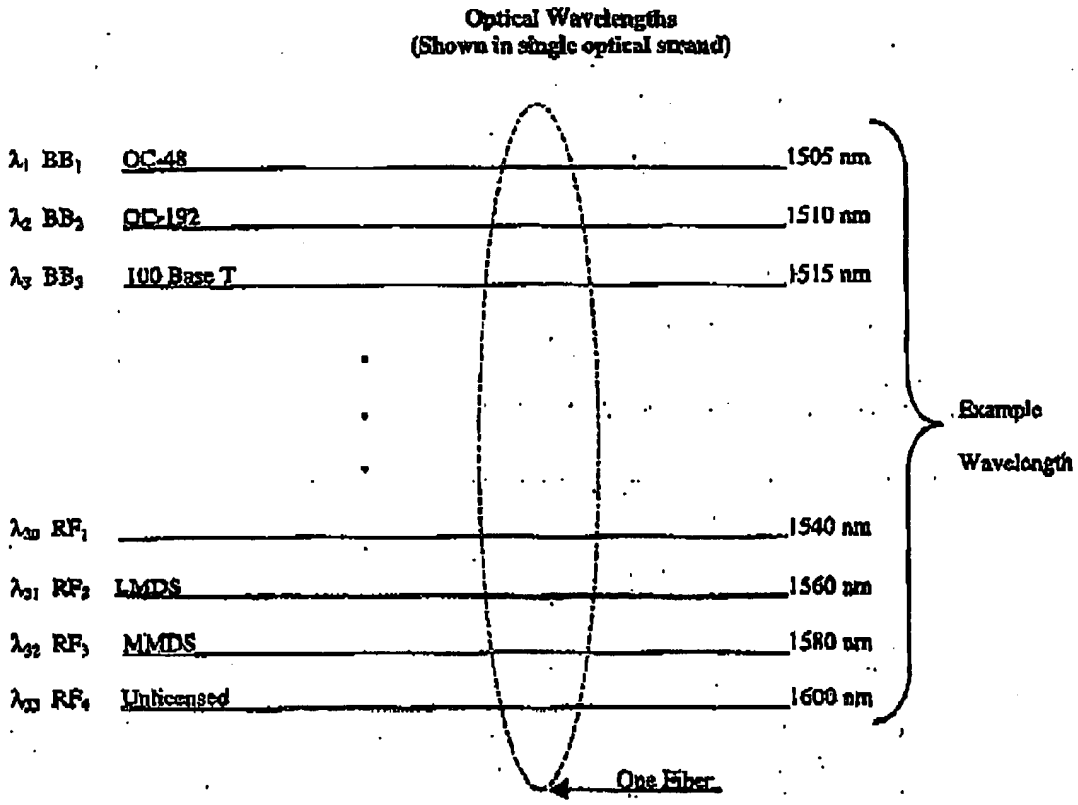
Outside Patent Counsel Docket No. _____

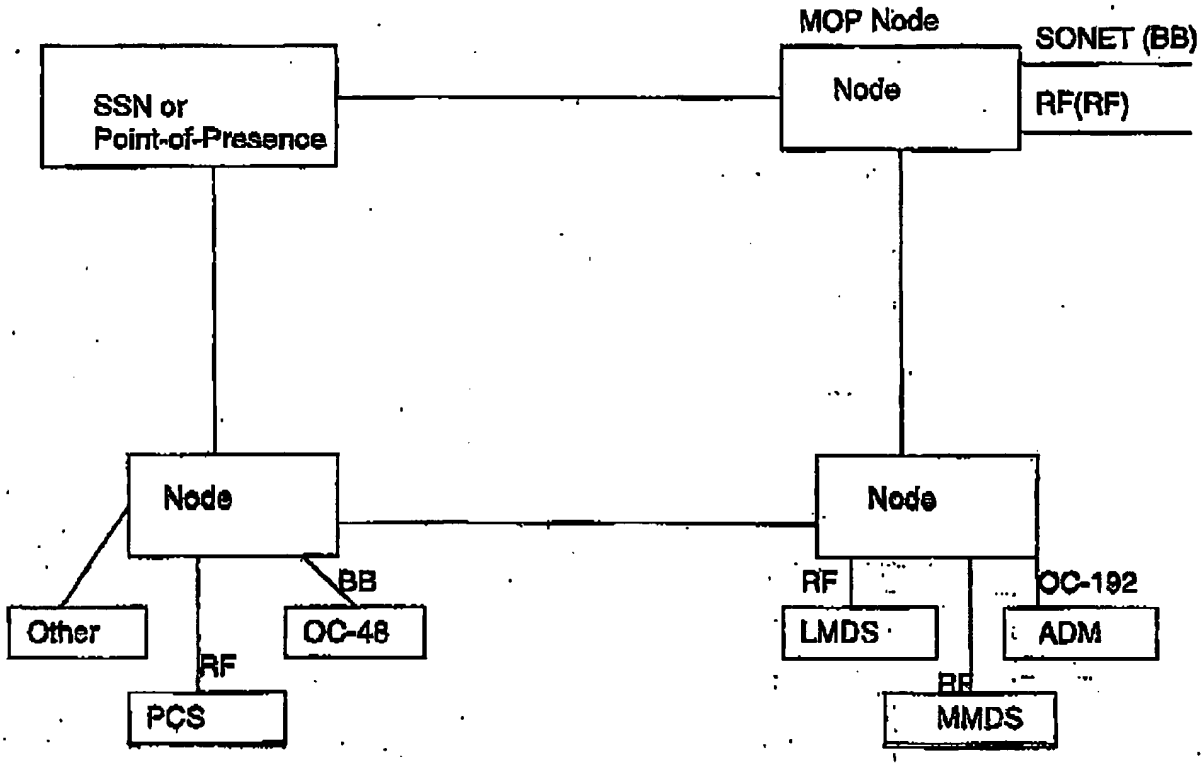
Title of Invention: MIXED OPTICAL PLATFORM (MOP)

Modern DWDM systems utilize upwards of 48 wavelengths. We believe that individual strands of fiber with x number of wavelengths can accommodate a mixed data/RF profile.

BB = Baseband Data
RF = Radio Signals

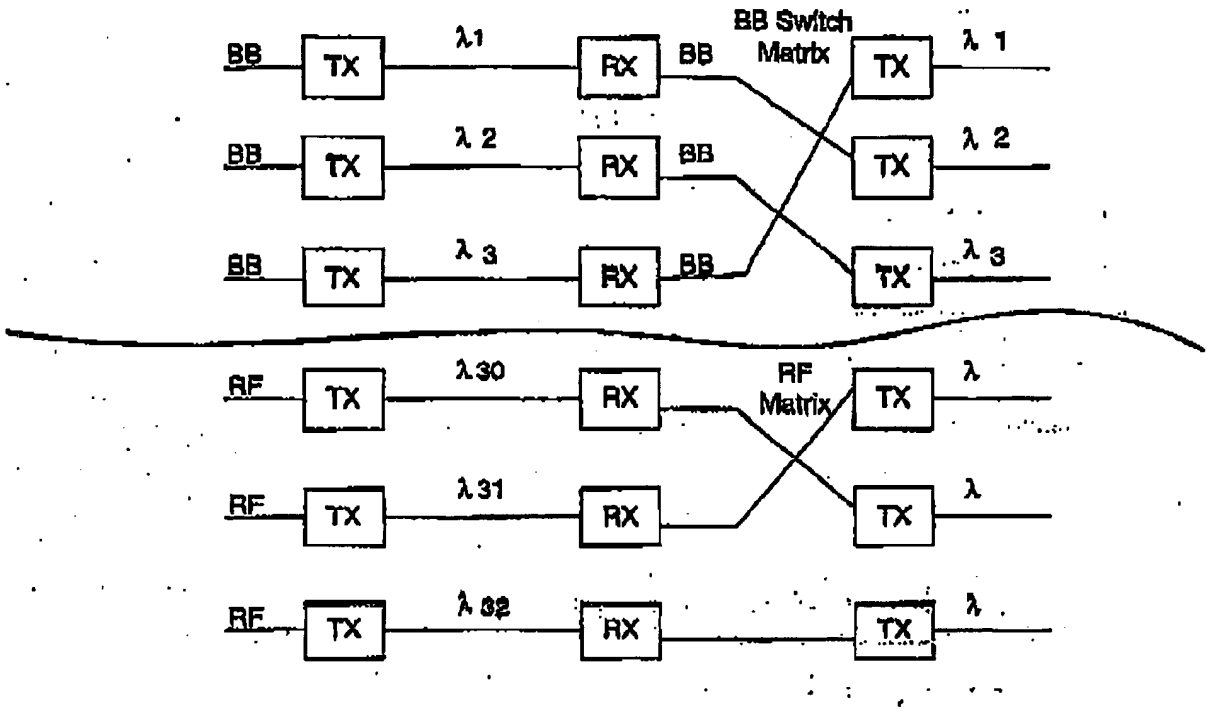
Sprint





NETWORK EXAMPLE

Sprint



CONCEPT CROSS CONNECT

Sprint

Reviewed and understood by:

Name: Tom L. Holmes

Signature: Tom L Holmes

Date: 2/19/04

SPRINT

Invention Disclosure for: Mixed Optical Platform

"MOP"

John W. Linebarger
SPRINT Corporation
Overland Park, KS

FORWARD —

Dense Wave Division Multiplex (DWDM) systems use individual optical wavelengths otherwise known as Lambdas to provide a unique pathway over optical strands. The typically application for this technology is to increase capacity or segerate traffic in a data network. This network may be world wide, nationwide or local to a city like setting. The typical application widely used by data/telecomms is to transport data/telephony from point to point. Other applications in the CATV industry use these methods for transport of RF signals in a local area.

IDEA —

Modern DWDM systems utilize upwards of 48 wavelengths. We believe that individual strands of fiber with X number of wavelengths can accomodate a mixed data/RF profile.

therefore, the useage of such a systems modeled appears as below:

BB= Broadband data i.e. OC-48, OC-192, 10/100 Baset

RF= Radio signals i.e. .— LMDS, MMDS, Unlicensed Bands

John Linebarger | MOP concept

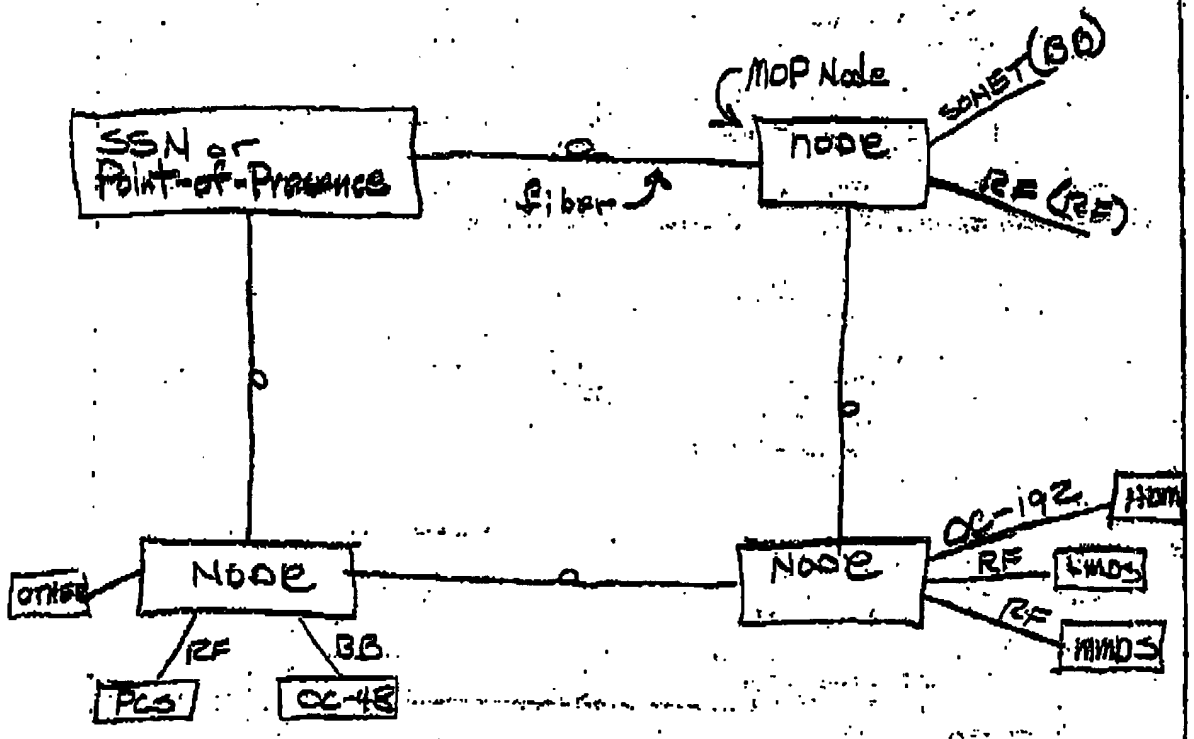
OPTICAL WAVELENGTHS
(shown in single optical STRAND)

λ_1 BB1 OC-48 1505 nm
λ_2 BB2 OC-192 1510 nm
λ_3 BB3 100 BASE T 1515 nm
•
•
•
λ_{30} RF1 1540 nm
λ_{31} RF2 LMDS 1560 "
λ_{32} RF3 MMDS 1580 "
λ_{33} RF4 unlicensed 1600 "

Example Wavelengths

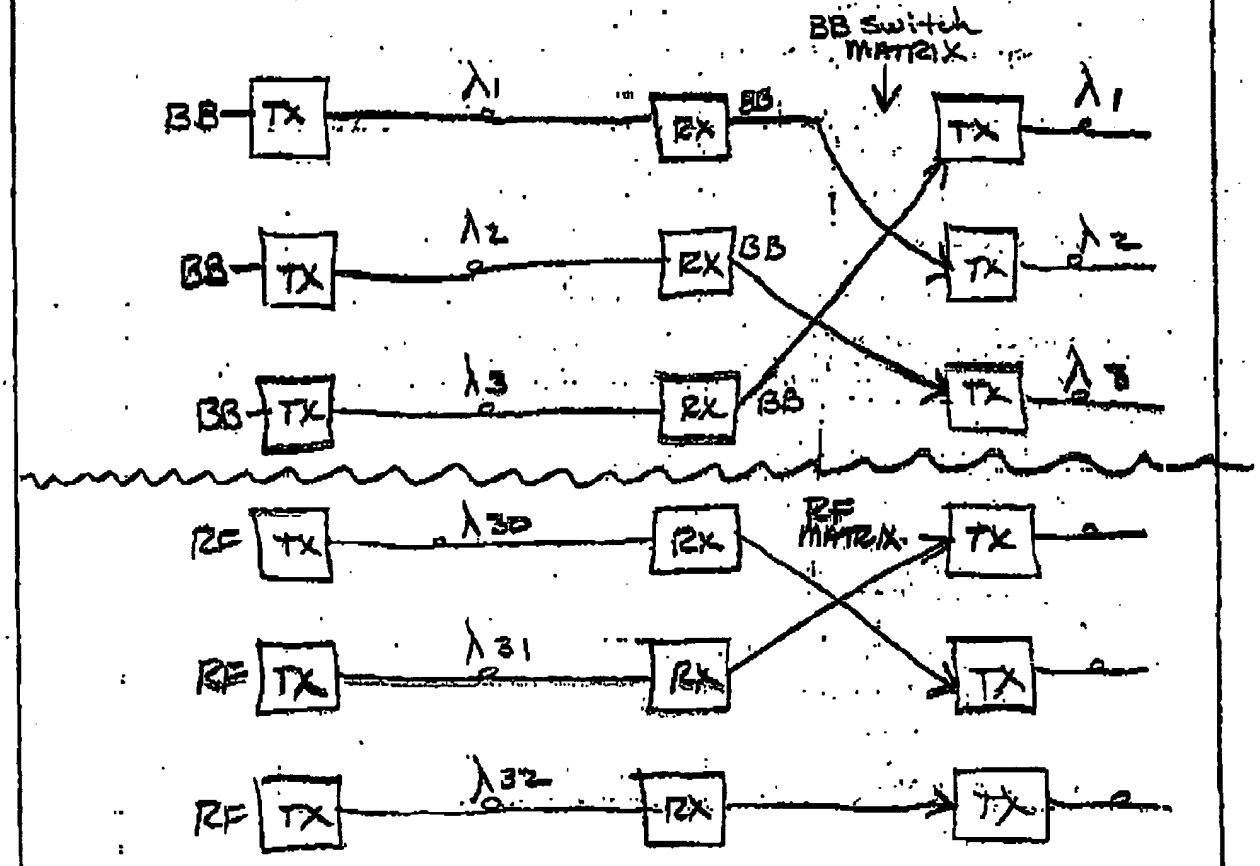
ONE FIBER

NETWORK EXAMPLE:



John Lineberger | MOP Concept |

THE CROSS-CONNECT WOULD APPEAR AS BELOW:

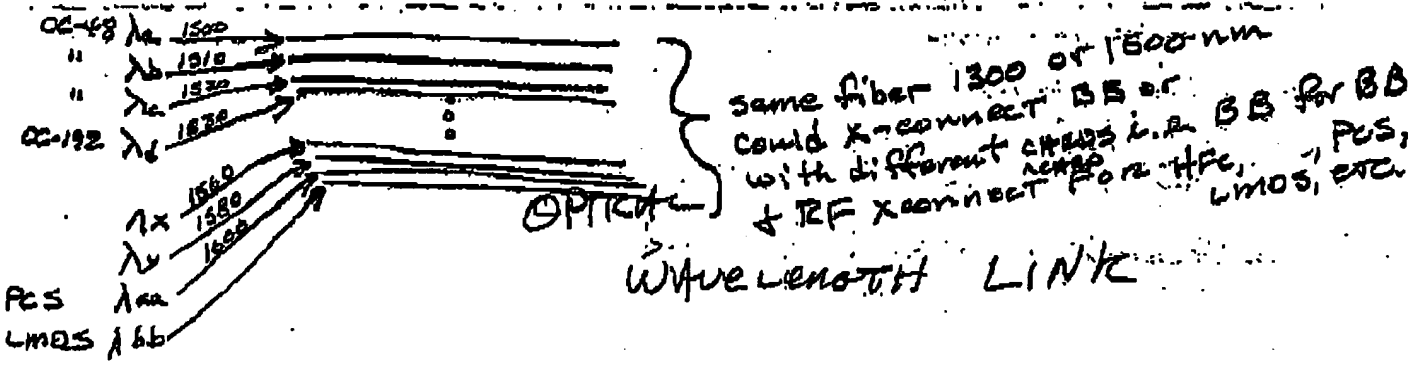


IDEA:

TAKE A DWDM OPTICAL PLATFORM & PROVISION PART OF THE WAVELENGTHS for use by RF services, in an RF domain AS found in HFC.

- AND - USE THE OTHER WAVELENGTHS FOR TRADITIONAL BASEBAND services such AS SONET, ethernet, ASYNC TYPE services.

As such —



PATENT
Attorney Docket No. 1459

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s)	Linebarger et al.	Examiner	Payne, David C.
Serial No.	09/784,517	Group Art No.	2633
Filed	February 15, 2001	Confirmation No.	3317
For	System and Method for Transmitting Signals Over a Fiber Strand		

Mailstop Non-Fee Amendment
Commissioner For Patents
P.O. Box 1450Alexandria, VA 22313-1450

Declaration
Under 37 C.F.R. § 1.131

We, Durga P. Satapathy and Michael J. Gettles, declare as follows.

1. We are named inventors for U.S. Patent Application No. 09/784,517, filed on February 15, 2001 (the "Application").

2. Sprint Communications Company L.P. ("Sprint") owns the entire right, title, and interest in and to the Application. The assignment from the named inventors to Sprint is recorded at reel 011602, frame 0543.

3. We have read and understand the specification and claims in the Application.

4. We have reviewed and understand the contents of the Office action dated November 20, 2003, and the references cited therein. We have reviewed and understand in particular U.S. Patent Pub. No. US 2001/0030785, filed by Pangrac et al. ("Pangrac") on December 22, 2000, and published October 18, 2001 ("Pangrac"), and U.S. Patent No. 6,519,062 B1, filed on September 1, 2000, taking priority to Provisional Application No. 60/185,640, filed on February 29, 2000, and issued to Yoo on February 11, 2003 ("Yoo").

5. This declaration is being presented under 37 C.F.R. § 1.131 to establish invention prior to the effective date of Pangrac (December 22, 2000) or conception of the invention prior to the effective date of Pangrac (December 22, 2000) coupled with due diligence prior to that date to a subsequent reduction to practice or to the filing of this Application.

6. This declaration also is being presented under 37 C.F.R. § 1.131 to establish invention prior to the effective date of Yoo (February 29, 2000) or conception of the invention

prior to the effective date of Yoo (February 29, 2000) coupled with due diligence prior to that date to a subsequent reduction to practice or to the filing of this Application.

7. Attached hereto as Exhibit A (10 pages) is an Invention Disclosure Form ("IDF") for a system and method for transmitting signals over a fiber strand (with some portions redacted). The IDF was completed by at least one named inventor and submitted to the Sprint Law Department on February 17, 2000, as noted on page 1 of the IDF. The IDF was signed by a witness on February 17, 2000, as noted on page 6 of the IDF.

8. A complete conception and reduction to practice of at least one embodiment of a system and method for transmitting signals over a fiber strand is identified in the IDF and the document attached to, and forming a part of, the IDF. Therefore, a complete reduction to practice of at least one embodiment of a system and method for transmitting signals over a fiber strand was made at least as early as February 17, 2000.

9. From February 17, 2000 through February 15, 2001, we worked on preparing and finalizing materials for the Application. We filed the Application on February 15, 2001.

10. All acts relied on were carried out within the United States.

11. Fewer than all inventors are making this Declaration because the remaining inventor, John W. Linebarger, is deceased.

I/we hereby declare that all statements made herein of my/our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and such willful false statements may jeopardize the validity of the Application or any patent issued thereon.

Respectfully Submitted,

Date _____ By _____
Durga P. Satapathy

Date February 19, 2004 By _____
Michael J. Gettles

Sprint

INVENTION DISCLOSURE FORM

Date: February 17, 2000

Assigned Numbers: Project No. _____ Invention Disclosure No. _____

Law Department File No. 1459

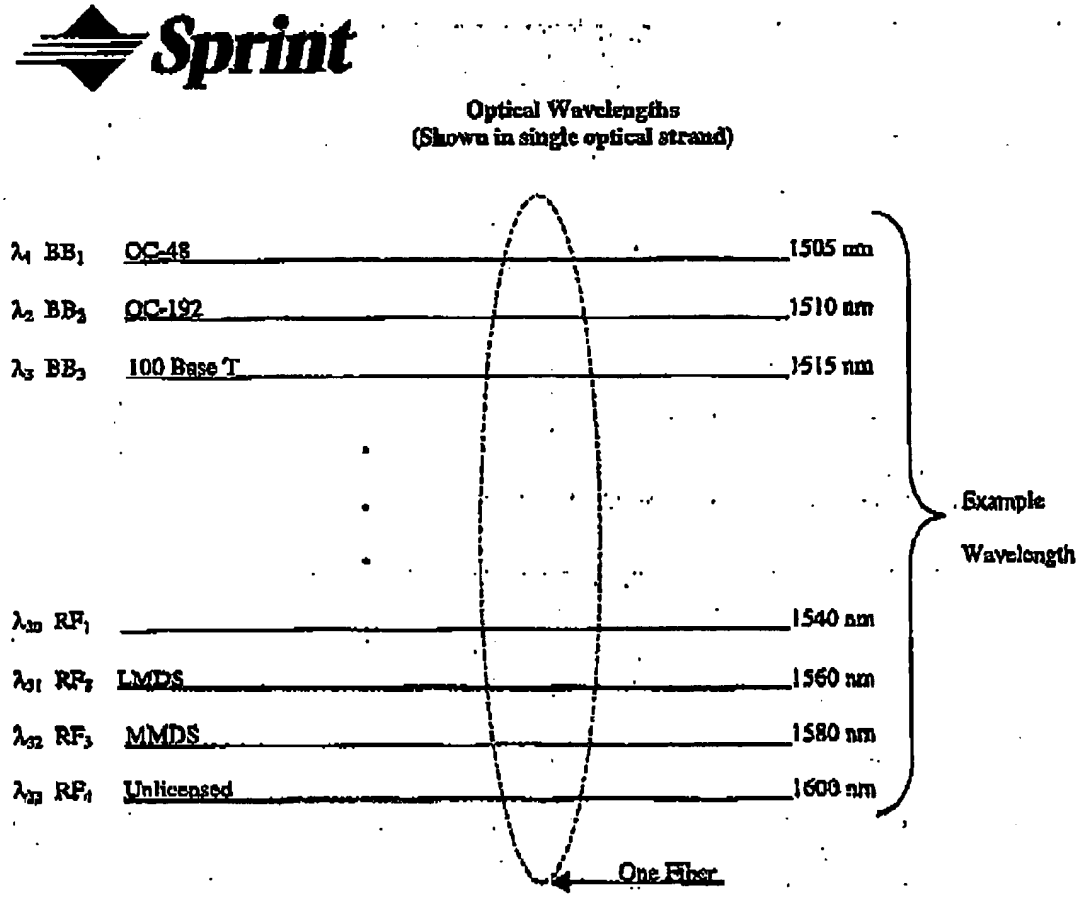
Outside Patent Counsel Docket No. _____

Title of Invention: MIXED OPTICAL PLATFORM (MOP)

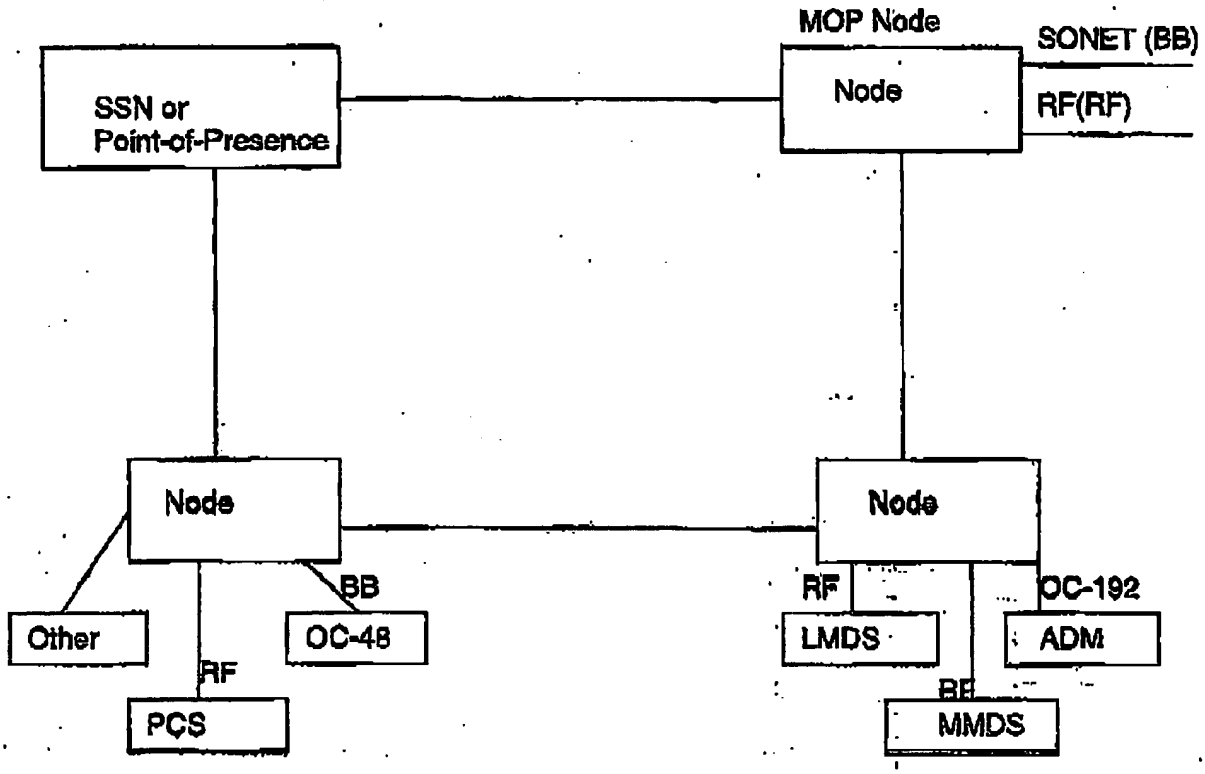
Sprint

Modern DWDM systems utilize upwards of 48 wavelengths. We believe that individual strands of fiber with x number of wavelengths can accommodate a mixed data/RF profile.

BB = Baseband Data
RF = Radio Signals

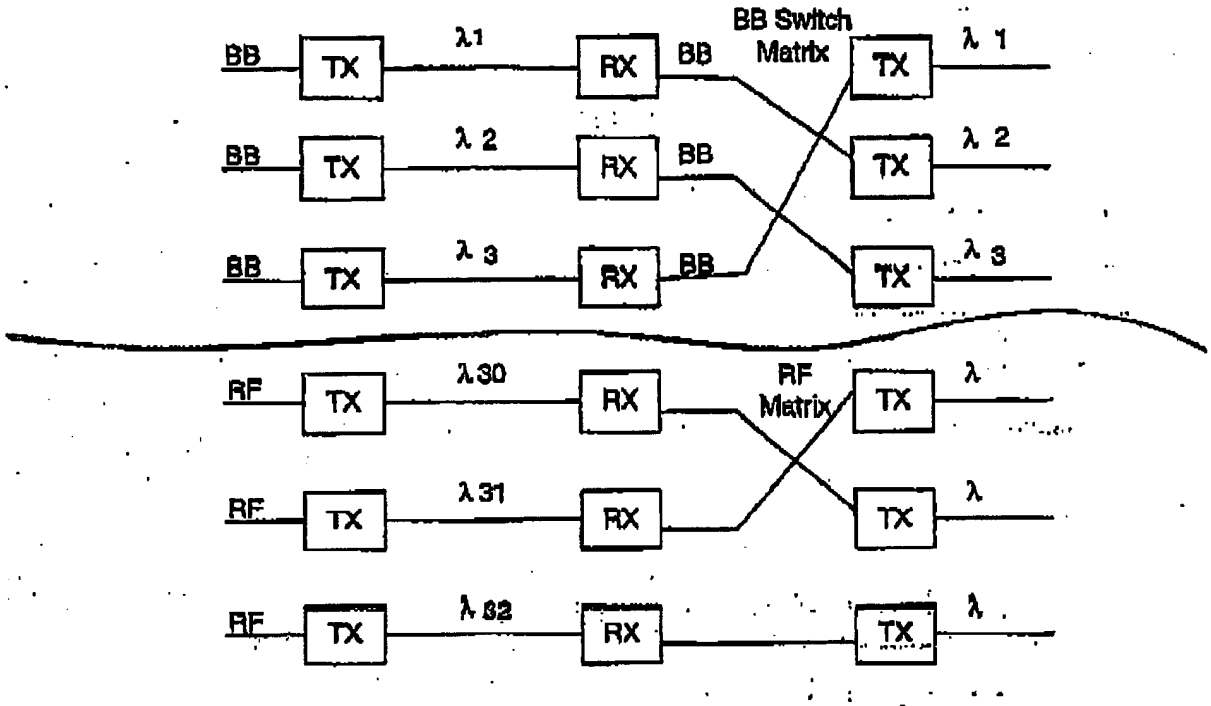


Sprint



NETWORK EXAMPLE

Sprint



CONCEPT CROSS CONNECT

Sprint

Reviewed and understood by:

Name: Tom L. Holmes

Signature: Tom L Holmes

Date: 2/19/04

SPRINT

Invention Disclosure for: Mixed Optical Platform "MOP"

John W. Linebarger
SPRINT Corporation
Overland Park, KS

FORWARD —

Dense Wave Division Multiplex (DWDM) systems use individual optical wavelengths otherwise known as Lambdas to provide a unique pathway over optical strands. The typically application for this technology is to increase capacity or segregate traffic in a data network. This network may be world wide, nationwide or local to a city like setting. The typical application widely used by data/telecomms is to transport data/telephony from point to point. Other applications in the CATV industry use these methods for transport of RF signals in a local area.

IDEA —

Modern DWDM systems utilize upwards of 48 wavelengths. We believe that individual strands of fiber with X number of wavelengths can accomodate a mixed data/RF profile.

Therefore, the useage of such a system would appear as below:

BB= BASEBAND DATA i.e. OC-48, OC-192, 10/100 BaseT

RF= Radio Signals i.e. ..... LMDS, MMDS, Unlicensed Bands

John Linebarger | MOP concept

OPTICAL WAVELENGTHS
(shown in single optical STRAND)

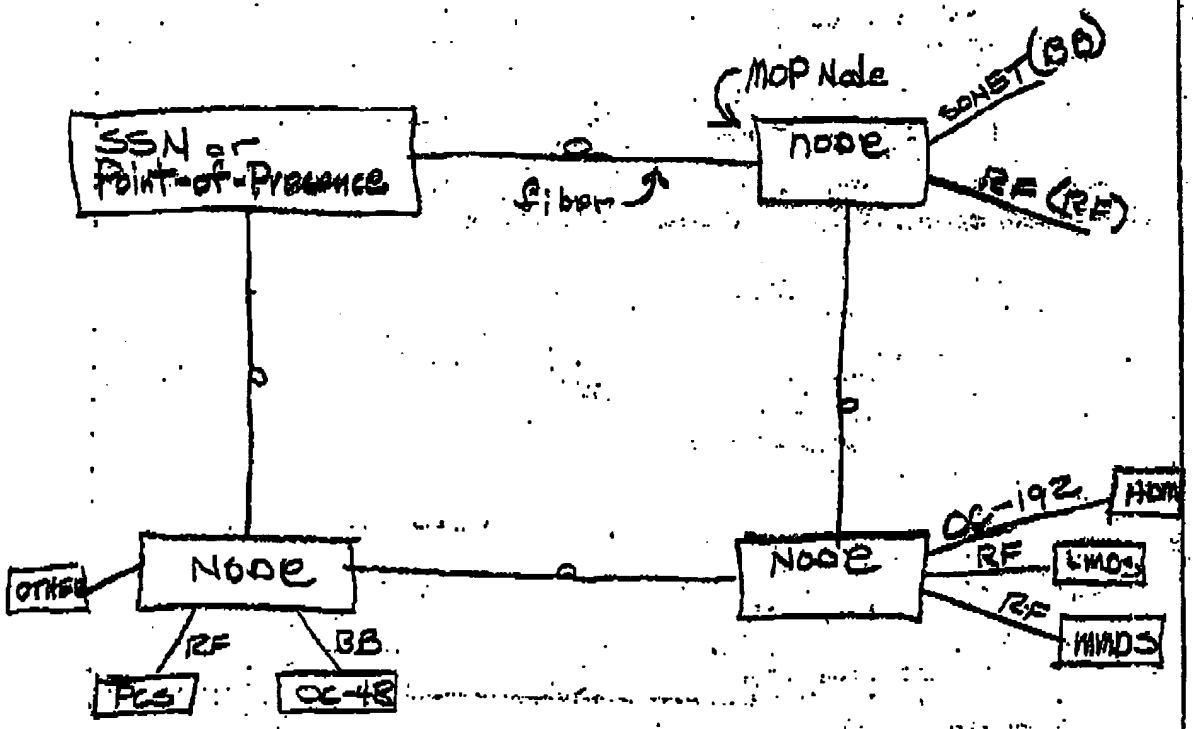
λ_1 BB1 OC-48 1505 nm
λ_2 BB2 OC-192 1510 nm
λ_3 BB3 100 BASE T 1515 nm

Example Wavelengths

λ_{30} RF1 1540 nm
λ_{31} RF2 LMDS 1560 "
λ_{32} RF3 MMDS 1580 "
λ_{33} RF4 unlicensed 1600 "

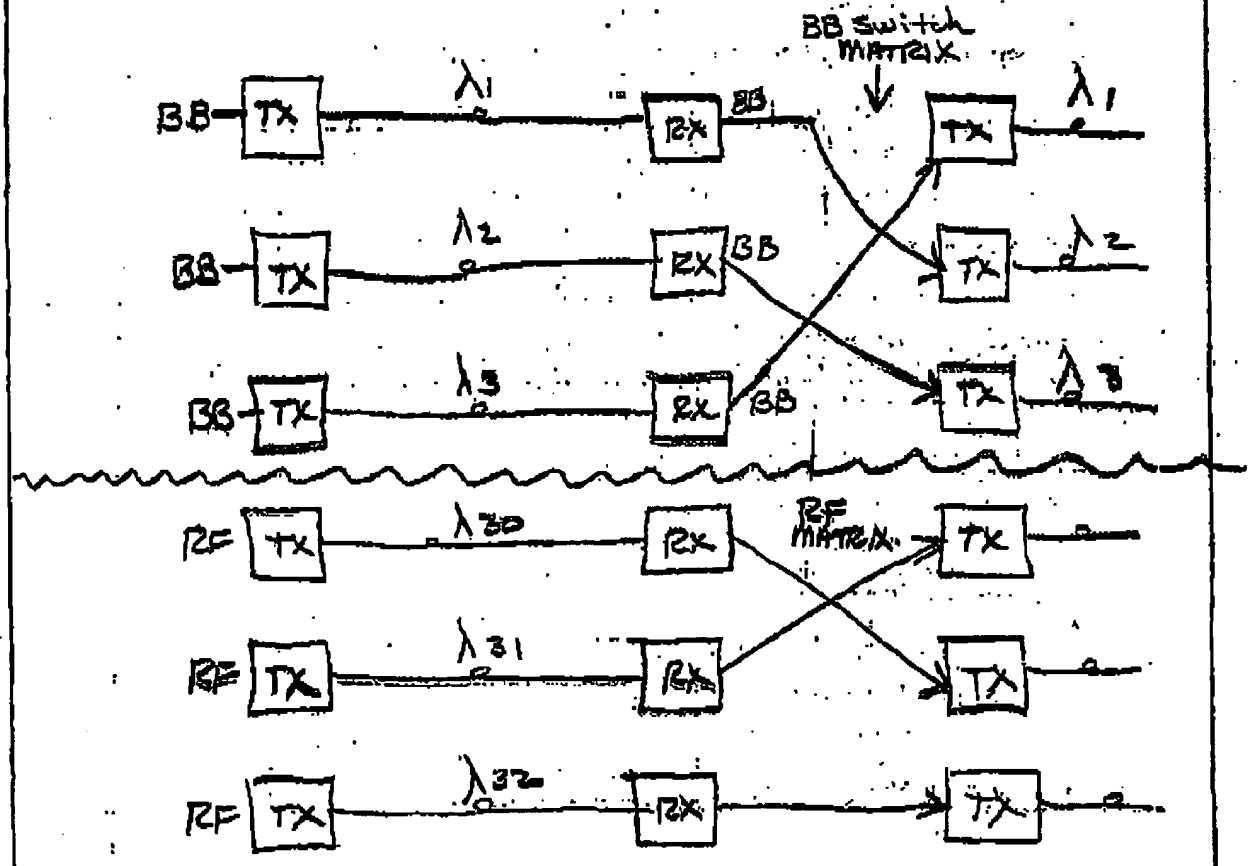
ONE FIBER

NETWORK EXAMPLE:



John Linebarger | MOP Concept |

THE CROSS-CONNECT WOULD APPEAR AS BELOW:



IDEA:

TAKE A DWDM OPTICAL PLATFORM & PROVISION PART OF THE WAVELENGTHS for use by RF services, in an RF domain AS found in HFC.

- AND - use the other wavelengths for TRADITIONAL Baseband services such AS SONET, ethernet, ASYNC TYPE services.

As such —